

IN THE DRAWINGS

Corrected drawings are supplied herewith.

Enclosed is a Replacement Sheet showing the following amendment to Figure 1.

Reference number 18 has been added to Figure 1.

REMARKS

Claim 9 is amended, claims 10 and 18-20 are canceled, and no claims are added; as a result, claims 1-9 and 11-17 are now pending in this application.

The specification was amended in the paragraph beginning on page 3 at line 16 in order to add reference number 18. Applicant submits that no new matter has been added. Support for the amendment can be found, for example, on page 3 at lines 13-14.

Objection to the Drawings

The drawings were objected to under 37 C.F.R. § 1.83(a) because the second top cord and the second bottom cord must be shown or the feature(s) canceled from the claim(s). Claims 18 and 19 are canceled. Therefore, this particular objection to the drawings has been overcome.

The drawings were objected to under 37 C.F.R. § 1.183(a) because they fail to show vertically extending planks 18 as described in the specification. Vertically extending planks are shown in Figure 1 as originally submitted. The vertically extending planks are now identified by reference number 18 in Figure 1, as amended in the Replacement Sheet. Therefore, this particular objection to the drawings has been overcome.

The drawings were objected to under 37 C.F.R. § 1.183(a) because the width of the single laminated panel equal to the width of the lower and upper chords must be shown or the feature(s) canceled from the claim(s). Claim 9 has been amended to include the elements of claim 10. Specifically, claim 9 now recites,

wherein said laminated panel structure is formed of two laminated panels extending parallel to and abutting one another, each said panel being formed of a series of elongated planks secured edgewise to one another;

In addition, claim 9 also recites,

said laminated panel structure having a width equal to the width of said lower and upper chords thereby defining a continuous rectangular shaped cross-section throughout the longitudinal direction of said joist.

Applicant therefore submits that the features of the invention, as claimed in amended claim 9, are as shown in the drawings. Thus, this particular objection to the drawings has been overcome.

Applicant submits that for at least the reasons stated above, each of the Office Action's objections to the drawings has been obviated, and therefore respectfully requests withdrawal of each of the above objections to the drawings.

§112 Rejection of the Claims

Claims 18 and 19 were rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the enablement requirement. Claims 18 and 19 are canceled. Therefore, the rejection is moot.

Claims 9-17 were rejected under 35 U.S.C. § 112, second paragraph for indefiniteness. With regards to this rejection, the Office Action on page 5 states, "It's confusing that 'said laminated panel structure having a width equal to the width of the lower and upper chords' because as shown in the figure 2 (see drawing objections) the width of two laminated panels equal to the width of chords not a single laminated panel as claimed." Claim 9, as amended, includes the elements of claim 10, including "said laminated panel structure is formed of two laminated panels extending parallel to and abutting one another." (emphasis added) Claim 9 further recites, "said laminated panel structure having a width equal to the width of said lower and upper chords." Hence, claim 9, as amended, particularly points out and distinctly claims the subject matter which the Applicant regards as the invention as shown in the drawings of the present application. Claim 10 is canceled, so the rejection of claim 10 is moot. Claims 11-17 depend from claim 9. Therefore, Applicant submits that the rejection of claims 9 and 11-17 have been overcome, and so respectfully requests withdrawal of the 35 U.S.C. § 112 rejection and reconsideration and allowance of claims 9 and 11-17.

§103 Rejection of the Claims

Regarding claims 1, 3, 7, 8, and 20

Claims 1, 3, 7, 8, and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller *et al.* (U.S. Pat. No. 4,195,462) in view of Veilleux *et al.* (U.S. Pat. No. 5,664,393). Claim 20 is canceled, so the rejection of claim 20 is moot. Applicant respectfully traverses the rejection of claims 1, 3, 7, and 8.

The Office Action must provide specific, objective evidence of record for a finding of a teaching, suggestion, or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action, in an attempt to meet this requirement, on page 6 states, "At the time of the invention, it would have been obvious to a person of ordinary skill in the art to substitute Keller's particleboard panel for the Veilleux's laminate panels. The motivation for doing so would have been to provide an aesthetically pleasing surface for the panels." Applicant disagrees. Applicant's representatives have carefully reviewed both Keller *et al.* and Veilleux *et al.*, and failed to find in either reference a teaching or suggestion of an "aesthetically pleasing surface." Hence, the motivation to combine the references is not supported by the record, and so the Office Action fails to meet the standard of *In re Sang Su Lee*.

Further, *Keller et al.* teaches away from making the combination with Veilleux *et al.* suggested by the Office Action. Veilleux *et al.* at column 1, lines 27-32 states, "It is an object of the present invention to provide a novel wooden joist which consists in having a web structure wherein each panel is formed of short laminated boards which are adhesively secured to one another by gluing." (emphasis added) In contrast, Keller *et al.* at column 1, line 55 through column 2, line 5 states,

In the present construction the web member comprises a particleboard structural panel formed of bonded, interleaved, elongated, wafer-thin wood flakes disposed in random orientations substantially parallel with plane of the panel. The grain of the wood in each flake runs longitudinally of the flake. The thickness of each flake is smalll [sic] in relation to the thickness of a pair of parallel tongues formed on opposite edges of the web panel whereby each tongue contains many layers of said flakes and a major proportion of said flakes in each tongue are bent across the grain of the wood when the tongues are pressed into inclined grooves in the chord members. The width of the tongues is small in relation to the length of the flakes.

Thus, the bent tongues on each edge of the web panel form a self-locking dovetail-type joint which enhances the strength of the joint and holds the parts in assembled relation without external clamps while glue in the joint is setting.

Hence, the reliance in Keller *et al.* of the use of wafer-thin wood flakes in each tongue to enhance the strength of the joint teaches away from the use of short laminated boards to form each panel as taught by Veilleux *et al.* Therefore, a person of ordinary skill would be

discouraged from using the short laminated boards of Veilleux *et al.* to form the tongues of Keller *et al.* because the boards of Veilleux *et al.* would not include the wafer-thin wood flakes of the particle board used in Keller *et al.*

For at least the reasons stated above, the Office Action fails to provide objective evidence of record for a finding of a teaching, suggestion, or motivation to combine references, and further fails to explain the reasoning by which the evidence is deemed to support such a finding. Therefore, the Office Action fails to state a *prima facie* case of obviousness with respect to claims 1, 3, 7, and 8.

Even assuming *arguendo* that Keller *et al.* and Veilleux *et al.* are not improperly combined, the Office Action still fails to state a *prima facie* case of obviousness with respect to claims 1, 3, 7, and 8. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Claim 1 recites, "said laminated panel structure being formed of a series of elongated planks adhesively secured edgewise to one another and extending vertically between said lower and upper chords." In contrast, Keller *et al.* at column 2, lines 32-34 states, "The present structural member comprises a web 10 interconnecting a pair of longitudinal chord members 11." Further, at column 1, lines 55-59 Keller *et al.* states, "In the present construction the web member comprises a particleboard structural panel formed of bonded, interleaved, elongated, wafer-thin wood flakes disposed in random orientations substantially parallel with plane of the panel." Therefore, Keller *et al.* fails to teach or suggest "a series of elongated planks adhesively secured edgewise to one another" as recited in claim 1.

In an attempt to supply the missing elements, the Office Action on page 6 states that Keller *et al.* discloses, "The panel being formed of a series of vertically elongated planks 13/14 adhesively secured edgewise to one another." However, as disclosed in Keller *et al.* at column

2, lines 38-40, "As shown in FIG. 1, each chord member 11 contains a pair of longitudinal grooves 14 having entrance portions 15 spaced apart to receive the tongues 13." Hence, the portion of Keller *et al.* cited by the Office Action refers to "grooves 14" and "tongues 13" and thus fails to teach or suggest "said laminated panel structure being formed of a series of elongated planks adhesively secured edgewise to one another and extending vertically between said lower and upper chords" as recited in claim 1.

In addition, Veilleux *et al.* at column 2, lines 16-17 states, "each panel 16 consists of a series of short obliquely extending boards 20, 22, 24, 26, 28 and 30 which are adhesively secured in an edgewise fashion to one another." (emphasis added) Thus, Veilleux *et al.* also fails to teach or suggest these elements of claim 1 as quoted above.

In another example, claim 1 recites, "wherein said joist is adapted to be cut at any length thereof to form an insert to block the ends of a truss between upper and lower chords of said truss." The Applicant's representative has carefully reviewed Keller *et al.* and Veilleux *et al.*, and fails to find any teaching or suggestion in either of the references regarding these elements as recited in claim 1. The Office Action fails to point out any reference that teaches or suggests these elements as recited in claim 1.

Thus, neither Keller *et al.* nor Veilleux *et al.*, either alone or in combination, teach or suggest each of the elements of claim 1. Therefore, the Office Action fails to state a *prima facie* case of obviousness with respect to claim 1, and so the Applicant respectfully requests withdrawal of the rejection and reconsideration and allowance of claim 1.

Claims 3 and 7-8 are dependent on claim 1. For reasons analogous to those stated above and elements in the claims, Applicant respectfully submits that the Office Action fails to state a *prima facie* case of obviousness with respect to claims 3 and 7-8. Therefore, Applicant requests withdrawal of the rejection and reconsideration and allowance of claims 3 and 7-8.

Regarding claims 10, 12, and 14-16

Claims 10, 12, and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller *et al.* (U.S. Pat. No. 4,195,462) in view of Peters (U.S. Pat. No. 4,336,678) and Veilleux *et al.* (U.S. Pat. No. 5,664,393). Claim 10 is canceled, so the rejection of claim 10 is moot. Applicant respectfully traverses the rejection of claims 12 and 14-16.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). Here the Office Action has combined Keller *et al.*, Peters, and Veilleux *et al.* by merely stating on page 6 that "At the time of the invention, it would have been obvious matter of design choice in the art to select a known material for desirable application. The motivation for doing so would have been to provide a good bonding between plank and chords and for a lightweight joist structure." Applicant disagrees. For example, there is no discussion in any of the cited references regarding "lightweight joist structure." Further, the Office Action fails to point out any specific citation in any of the references regarding "good bonding between plank and chords." Hence, Applicant respectfully submits that the statements in the Office Action are mere conclusory statements based on impermissible hindsight using the Applicant's disclosure.

Because the Office Action's basis for combining the references is improper, the Office Action fails to provide objective evidence of record for a finding of a teaching, suggestion, or motivation to combine references, and so the Office Action fails to state a *prima facie* case of obviousness with respect to claims 12 and 14-16.

Even assuming *arguendo* that Keller *et al.*, Peters, and Veilleux *et al.* are not improperly combined, the Office Action still fails to state a *prima facie* case of obviousness with respect to claims 12 and 14-16. Claims 12 and 14 -16 depend from claim 9, and therefore include all the elements of claim 9. The Office Action on page 6 states "Keller teaches the structural elements for the joist as stated." Applicant respectfully disagrees. For example, claim 9 as amended recites, "wherein said laminated panel structure is formed of two laminated panels extending parallel to and abutting one another." (emphasis added) The Office Action admits on page 6 (and again on page 7 with regards to claims 2 and 4-6) that Keller *et al.* does not teach a laminated panel structure formed of two laminated panels. Since the Office Action does not cite another reference disclosing these elements as recited in claim 9, Applicant assumes that the Examiner is taking official notice from an undisclosed source of this missing elements. Applicant respectfully objects to the taking of official notice, and pursuant to M.P.E.P. § 2144.03, Applicant traverses the assertion of official notice and requests that the Examiner cite a

reference that teaches the missing elements. If the Examiner cannot cite a reference that teaches the missing elements, Applicant respectfully requests that the Examiner provide an affidavit that describes how the missing elements are present in the prior art. If the Examiner cannot cite a reference or provide an affidavit, Applicant requests withdrawal of the rejection and reconsideration and allowance of claims 12 and 14-16.

For at least the reasons stated above, the Office Action fails to state *prima facie* case of obviousness with respect to claims 12 and 14-16. Therefore, Applicant respectfully requests withdrawal of the rejection and reconsideration and allowance of claims 12 and 14-16.

Regarding claims 2 and 4-6

Claims 2 and 4-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller *et al.* (U.S. Pat. No. 4,195,462) in view of Veilleux *et al.* (U.S. Pat. No. 5,664,393). Applicant respectfully traverses the rejection of claims 2 and 4-6.

As noted above with regards to the rejection of claims 12 and 14-16, there is no teaching or suggestion in either Keller *et al.* or Veilleux *et al.* of securement for "lightweight joist structures." Thus, the Office Action fails to provide objective evidence of record for a finding of a teaching, suggestion, or motivation to combine references and so fails to state a *prima facie* case of obviousness with respect to claims 2 and 4-6.

Further, assuming *arguendo* that Keller *et al.* and Veilleux *et al.* are not improperly combined, the Office Action still fails to show how the combination teaches or suggests each of the elements of claims 2 and 4-6. Claims 2 and 4-6 depend from claim 1. As noted above with regards to the rejection of claims 1, 3, 7, and 8, neither Keller *et al.* nor Veilleux *et al.*, either alone or in combination, teach or suggest each of the elements of claim 1. Thus, neither Keller *et al.* nor Veilleux *et al.*, either alone or in combination, teach or suggest each of the elements of claims 2 and 4-6.

For at least the reasons stated above, the Office Action fails to state a *prima facie* case of obviousness with respect to claims 2 and 4-6. Therefore, Applicant respectfully requests withdrawal of the rejections and reconsideration and allowance of claims 2 and 4-6.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9587 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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31 March '05

By


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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 31st day of March, 2005.

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